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America's First Immigrant: Ice Age Man

Afghanistan, the Land Beyond Khyber Pass

Australia Adopts Cocos, Tiny Indian Ocean Kingdom

Mean Mink Provide Most Desired Fur

SEEING AMERICA FIRST—A Fur-Clad Ice Age Family Crosses a Snow-Covered Rise in Bering Strait, the Route That Brought Asian Nomads to North America 20,000 Years Ago. In Prehistoric Days, a Land Bridge Probably Spanned the Still-Shallow Strait

FROM A PAINTING BY ANDRE DURENCEAU, © NGS

spread in their wake. Glacial sheets shattered and separated, forming an ice-free strip that probably embraced the upper Mackenzie River Valley. For Ice Age wanderers it was an avenue from the Arctic to North America's ice-free interior, a new hunting ground (map, page 186).

They drifted south in small groups. Game still was too scattered to support large numbers. They lived from hand to mouth, always moving, always hunting. Animals gave them weapons, food, clothing, shelter.

Hunters hurled stone-pointed spears into the tough hide of a giant prehistoric bison, then rushed in with clubs to kill the weakened 2,250-pound monster (page 184). Perhaps these ancient spearmen were the continent's first camouflagers. Since wolves often followed herds, they probably dressed in wolfskins and waited for bison at waterholes.

They stalked now-extinct mastodons and woolly mammoths, native camels and horses. Smaller game known to Ice Age Americans, like wolves, bear, deer, antelope, and rabbits, remain almost unchanged today.

Triumphant hunters hacked up their kill with crude stone knives, then carried it to camp. There, women in shaggy skirts roasted huge steaks over open fires. They staked down the bison hide and scraped it clean to make a tent or clothes (page 185).

One of their abandoned camps, uncovered in Colorado's Lindenmeier Valley just two decades ago, gave a glimpse into the hazy life of Ice Age Americans. Geologists said the campsite was 10,000 years old.

Since then, the Atomic Age has pushed back the curtains of the Ice Age even farther. The Geiger counter, in addition to making lucky uranium prospectors rich, has delighted archeologists with its ability to measure radioactivity of such campsite remains as clothing, charred animal bones, and shells. The amount of carbon 14 remaining in these relics accurately determines their age and enables scientists to add untold millenniums of the ghostly past to man's knowledge. For instance, we know that charcoal found in a Nevada site was a blazing fire that warmed an Ice Age hunter and cooked his food 23,800 years ago.

FOLSOM POINTS LINK MAN TO ANCIENT PAST

Spearheads and Extinct Bison Bones Found near Folsom, New Mexico, Helped Date Early Americans

SCIENCE SERVICE

Eventually these nomads—ancestors or forerunners of all American Indians—wandered even to South America. The halting journey by foot probably took several thousand years. Also they drifted east of the Rockies into most of the United States. Their tools and dart points still turn up at ancient campsites.

National Geographic Magazine

Dec., 1955, "Ice Age Man, the First American" (school price 55¢); Feb., 1942, "Parade of Life Through the Ages" ($1)

POINTS FOR PREHISTORIC GAME—Ice Age Craftsmen Flake Crude Quartz into Sharp Spearheads Used by Hunters to Fell Fierce Bison and Mastodons That Roamed America

America's First Immigrant: Ice Age Man

Illustrations from paintings by Andre Durenceau

Some 20,000 years ago, when glaciers still held North America's upper half in their icy grip, the first Americans stepped cautiously onto the Alaska shore (cover painting).

They were burly, homeless nomads, dressed in furs, their stringy black hair wet and dripping with spray and mist from waters of Bering Strait. Stalking big game, they had wandered out of Siberia, perhaps on a land bridge when the level of the sea was lower than it is now, perhaps on ice in winter, or maybe even by boat.

A vast, terrifying wilderness of ice-covered mountains rose like a wall before them. For generations, they probably stayed close to the friendly sea which provided much of their food. Slowly, hesitantly, they groped through glacial mists into mountain passes and river valleys.

As the great jagged ice cakes slowly withdrew, forests and meadows

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LAST-PIX

Afghanistan, the Land Beyond Khyber Pass

Khyber Pass. The name alone seems to sing a war song of raiding mountain tribesmen, of dusty sepoys spreading out to defend a caravan, of Rudyard Kipling and his cheerful, long-suffering *Soldiers Three.* Khyber Pass, for centuries, was described as the main doorway into British India from the northwest. Beyond it, beyond the mysterious North-West Frontier of boyhood adventure stories, lay wild, unknown Afghanistan.

Times have changed since Kipling's day. India and Pakistan share the Indian subcontinent. And Soviet Russia looms north of both of them, a far more threatening specter than the tsarist land of the 19th century. But Khyber Pass still slices through bald, craggy mountains, and camel trains like the one above still amble through it. Beyond it still lies Afghanistan, a buffer kingdom wooed by both the free and communist worlds.

Not one railroad crosses Afghanistan's mountains, broad deserts, and terraced farmlands. To get from Khyber Pass to Kabul, the nation's capital, you can either steer your own car around potholes or sit in a cramped bus and suffer bravely while an Afghan driver does the work. Busses join with a few cars and numerous trucks, painted with calendar-art scenes, on Kabul's streets. Among them, irritable camels and sleepy donkeys plod through this city of a quarter-million.

If you hail a taxi, you'll probably get a horse-drawn two-wheel cart on which you sit precariously, facing the rear. Proudly independent, like all Afghans, the driver may let you out, politely, long before he has reached

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Campsites and relics of ICE AGE NOMADS

PRESENT-DAY COAST LINE SHOWING GREATEST EXTENT OF LAST GLACIATION

1. Folsom, New Mexico. First accepted evidence of Ice Age man
2. Danger Cave, Utah. 9,000-year-old basketry, earliest found in New World
3. Fort Rock Cave, Ore. Sandals from same period as Danger Cave basketry
4. Tule Springs, Nev. Tests indicate charcoal, possibly of human origin, is more than 23,800 years old.
5. Lindenmeier valley, Colo. Artifacts allow reconstruction of Folsom culture.
6. Clovis, N. Mex. Fluted points found beneath typical Folsom artifacts indicate Clovis man older than Folsom.
7. Dinwiddie and Mecklenburg Counties, Va. Clovis-type fluted points
8. Lubbock, Texas. Folsom points 9,500 to 10,000 years old
9. Midland, Texas. Skull of Midland man at least 12,000 years old
10. Sandia and Manzano Mts., N. Mex. Artifacts belonging to predecessor of Folsom man
11. Gypsum Cave, Nev. Triangular-shaped blades 10,500 years old
12. Death Valley, Calif. Site compares in age to Lindenmeier valley.
13. Arizona-New Mexico. Cochise culture 1,500 to 7,500 years old
14. Conkling Cavern, N. Mex. Skull could challenge Midland man's as earliest in New World.
15. Yuma County, Colo. Ancient culture characterized by long, slender, nonfluted points
16. Cape Denbigh, Alaska. Artifacts estimated to be 8,500 years old
17. Brooks Range, Alaska. Habitation sites with artifacts similar to those found at Cape Denbigh.
18. Vero Beach and Melbourne, Florida. Remains of man and extinct animals
19. Pelican Rapids, Minn. Skeleton of Minnesota girl in clay deposited 20,000 years ago
20. Chile. Organic remains 8,000 to 9,000 years of age found in cave.
21. Punin district, Ecuador. Primitive skull found with bones of extinct animals
22. Minas Gerais, Brazil. Human skeleton discovered in same stratum with bones of mastodon and extinct horse.

© NATIONAL GEOGRAPHIC MAP

MAYNARD OWEN WILLIAMS

KABUL RIVER SPLITS AFGHAN CAPITAL—A Trickle in Dry Season, It Drains Distant Peaks, Often Snow Clad. Donkeys Drink Their Fill as Kabul Traffic Passes

A few mills turn out buttons, matches, leather, furniture, boots, and cotton textiles. But development of minerals has hardly begun. Gold and silver lie under rocky mountain shoulders. Oil awaits the driller.

Descendants of many races, Afghans vary in dress and manner, are usually cordial to strangers. Jean and Franc Shor, traveling for *The National Geographic Magazine* in 1950, reached regions unvisited by outsiders since Marco Polo passed through nearly 700 years ago.

Today, with Russia and the West both seeking favor in this strategic land, foreign influence is more noticeable. The United States spends about $2,000,000 a year on technical assistance. An American company built the highway to Kandahar. Another constructed an earthen dam on the Helmand River which has turned desert acres into wheat-growing irrigated land.

National Geographic References: ***Map***—Southwest Asia (paper 50¢, fabric $1)

Magazine—Sept., 1953, "American Family in Afghanistan" (75¢)
Nov., 1950, "We Took the Highroad in Afghanistan" (75¢)
Oct., 1946, "Back to Afghanistan" (75¢)

School Bulletins—Mar. 8, 1954, "History Still Marches Through Khyber Pass" (10¢)

your destination. He is hungry, perhaps, or his horse is tired.

Kabul is far more modern than in 1931-32, when the National Geographic Society cooperated with the Citroën-Haardt Trans-Asiatic Expedition, which traversed Afghanistan in a flurry of desert dust and amid greetings of awestruck tribesmen. Some city streets are paved. There are more elementary schools, a university, a handful of movie theaters where young Afghans cheer American cowboy heroes and hiss the "baddies." But Afghan women, swathed in tentlike cloaks, still keep in the background. Illiteracy is widespread.

H. MADSEN

ALI BABA WORE SHOES LIKE THESE

Squatting on an Oriental Carpet in a Kabul Market, an Afghan Cobbler Fashions Turned-up Toes in "Arabian Nights" Style

Suppose that from Kabul you set out to explore this kingdom, which until comparatively recently was closed to foreign visitors. Northwest of Kabul lies Bamian, where a broad valley holds mud-fenced farms. In the distance looms the snow-streaked Koh-i-Baba mountain range and in cliffs towering above the valley two huge carved niches shelter ancient figures of Buddha. One is 116 feet tall, the other towers 175 feet. Long ago Moslems mutilated their faces, carrying out Mohammed's injunction against idols. Visitors scramble to the head of the taller statue for a heart-stopping view.

The town of Herat lies near Afghanistan's northwest corner which juts between Iran and Russia. Fine tiling of mosques indicates Persian influence. Men wear tall karakul hats, short quilted coats, and stride through bazaars in soft black leather knee boots. Beehive-shaped houses dot the plains.

In warm Kandahar, the nation's second city, wide-spread, white stucco houses look almost modern. Broad porches face tasteful gardens with pomegranate trees and grapevines. Yet in Kandahar, people follow foreigners through the bazaar, bursting with curiosity.

Texas-size Afghanistan, ridged with high, barren mountains, suffers from lack of water. Only about a fifth of the country is farmed. Fruit, nuts, grains grow in terraced and irrigated plots. Sheep and cattle graze wherever nomadic herders wander—to the highlands in summer, back to warm bottomlands when weather turns cold. Karakul, the curly wool of fat-tailed Afghan lambs, and skins are the country's chief exports. In the United States the wool makes Persian lamb coats for stylish ladies.

is free—and seldom needed. Four "watchers" serve as police, but even minor lawlessness is unusual. At the age of 65, islanders may retire on half pay if they want.

The present king of the Cocos, another John Clunies-Ross, great-great-grandson of the original, has been facing the problem of overpopulation. The largest island is only five miles long and the little kingdom's economy is based on a population of perhaps 1,000 at most. After the war it rose closer to 2,000. So island families were encouraged to migrate to Indonesia. Island law bars them from returning, lest their tales of the outside world cause restless curiosity. For the same reason, no new immigrants are allowed to settle on Cocos.

King John himself is immune to such restrictions. Educated at Oxford, he married a blonde, British fellow student and brought her back to be queen of his quiet retreat.

But Cocos has known plenty of action, too. In 1914, the German raider *Emden* landed a party to destroy the cable station on Direction Island. An Australian cruiser, H.M.A.S. *Sydney*, caught the *Emden* in the act, drove her ashore on distant North Keeling Island, and pounded her to pieces. Watching the battle from the cable shack, the German shore party left its job of destruction unfinished, commandeered a small boat, and made an epic voyage to the Netherlands East Indies. The wreck of the *Emden*, meanwhile, provided islanders with a fine store of metal and equipment.

During World War II Japanese bombers raided the group. For defense of the cable station, an airstrip was built on West Island. This strip, now enlarged and maintained, serves Australia's airliners.

Already one change has come to Cocos. Australian currency has replaced bone or celluloid disks, minted by the Clunies-Ross family, which islanders long used for money. But the sun still warms spreading beaches around the lagoon. Indian Ocean surf still pounds drowsily on the outer shores of "this other Eden" (right).

R. S. STROUT

National Geographic References

Map—Indian Ocean (paper 50¢, fabric $1)

Magazine—Mar., 1951, "*Yankee* Roams the Orient" (75¢)

July, 1939, "At Home on the Oceans" ($1)

School Bulletins—Feb. 15, 1954, "Air Age Makes Key of Remote Cocos" (10¢)

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IRVING JOHNSON

COCOS BOYS DRESS UP FOR CEREMONY
But Bare Feet Peek from Beneath a Gown That Shows the Malayan Influence in the Islands

Australia Adopts Cocos, Tiny Indian Ocean Kingdom

Here is an easy way to find a tropical island paradise. Spread out the National Geographic map of the Indian Ocean. From the southern tip of Sumatra, measure about two inches (a little more than 600 miles) in a southwesterly direction. Under your pencil lie the Cocos or Keeling Islands, where soft palms ring a placid lagoon. For 129 years, an isolated community has flourished there under the rule of benign "kings" of Scottish descent.

On the map, Great Britain is named administrator of the Cocos. But the group's 27 small, low-lying islands are now Australian territory. The final formalities of the switch ended in November, 1955.

The change-over may bring some new notes to a South Sea idyl. Though British Captain William Keeling discovered the balmy atoll in 1609, no one was interested in the uninhabited isles until 1827. Then John Clunies-Ross, a Scottish adventurer, moved his wife, mother-in-law, a few companions, and 12 Malay families to Home Island and went into the copra business. He sought to turn his colony over to Great Britain, but failed to arouse much enthusiasm. He adopted the title of "king" and laid down a remarkable set of laws to keep his subjects happy. For five generations the Clunies-Ross family has ruled Cocos, even though Great Britain finally took the islands under protection.

At the age of 14, island boys become apprentices in workshops, boat-building sheds, or smithies that fill demands for tools and equipment. If, after two years, a boy shows no aptitude for this mechanical work, he is given a job on roads or in plantations. But if he qualifies as a craftsman, he starts work with solid training behind him.

For girls, work is optional. At the age of 16 they may marry. Boys must be 18. To every newlywed couple, the Clunies-Ross dynasty presents, rent free, a home complete with essential pieces of furniture. Flour and certain basic foods are free. Others are sold at cost price. Twice a week a doctor comes from Direction Island, also in the Cocos, where vital cables link Australia, Africa, and Indonesia. Medical care

H. H. SHELDON

Mean Mink Provide Most Desired Fur

A mink coat (on a woman) signifies the height of luxury. A mink coat (still on the mink) proclaims possibly the meanest disposition in the animal kingdom. Quarrelsome look on the wild mink above is no accident.

You can't make a pet of a mink. Nervous and irritable, it bites the hand that feeds it. Devotion to its "kits" is a redeeming feature, but in moments of emotional stress it may viciously devour them. Thunderstorms or passing airplanes may set off this unsocial behavior.

Naturalists see no connection between the mink's meanness and the beauty of its fur—perhaps the most sought after in the world. From the Gulf of Mexico to the Arctic Circle, trappers tramp marshes and riverbanks in search of pelts. But their efforts fall far short of supplying the demand. Mink ranches from Maine to California produce thousands of the small furry mammals, cousins of otter and weasel.

Trappers and breeders disagree on the merits of wild and ranch-bred mink. Outdoorsmen believe wild animals develop rugged physiques and thicker, more durable coats. Ranchers say their mink, brought up under ideal conditions, haven't a thing to do but sit in well-designed cages and grow superb fur. By selective breeding of generations, ranchers can change the pelt's natural brown to highly salable black, tan, blue, white.

One breeder claims one white mink in 16, an impossibility according to Mendel's law of heredity. His mink, he asserts, never heard of Mendel. Besides, they are mean and independent enough to write their own laws.

National Geographic Magazine—Mar., 1948, "The Romance of American Furs" (75¢)
Aug., 1947, "Men, Moose, and Mink of Northwest Angle" (75¢)